Health Information Technology Policy Committee
DRAFT
Summary of the June 6, 2012 Meeting

KEY TOPICS

1. Call to Order
Mary Jo Deering, Office of the National Coordinator (ONC), welcomed participants to this Health Information Technology Policy Committee (HITPC) meeting. She reminded the group that this was a Federal Advisory Committee meeting being conducted with the opportunity for public comment, and that a transcript would be made available on the ONC Web site. She conducted roll call and then turned the meeting over to HITPC Chair Paul Tang.

2. Review of the Agenda
Tang explained that most of this meeting would be dedicated to providing HITPC Workgroup feedback to ONC on its RFI for the governance mechanisms (including responses to 66 RFI-related questions). The meeting would also feature comments from the United Kingdom's Secretary of Health, Andrew Lansley, regarding some of the new programs in the U.K., as well as information from the Centers for Medicare and Medicaid Services (CMS) on Stage 1 meaningful use attestation and barriers.

> **Action Item #1:** Minutes from the May 2, 2012, HITPC meeting were approved by consensus, with some edits from Christine Bechtel.

3. ONC Briefing on Request for Information (RFI) on Governance for the Nationwide Health Information Network
Steve Posnack, ONC, explained that the statutory authority in the HITECH Act requires the National Coordinator to establish a governance mechanism for the Nationwide Health Information Network (NwHIN). He emphasized that the statutory authority does not call on the National Coordinator to "govern" the NwHIN and so the ONC has been focusing on the governance mechanism construct and what it should look like. The ONC has approached implementing this statutory language by asking where it can uniquely add value. A multifaceted approach has been proposed. Posnack explained that the ONC is looking to create foundational structures and processes that would be necessary to support nationwide electronic health information exchange. At its core, the governance mechanism in the RFI is not necessarily about one particular form of exchange or method; it is about putting in place the policy and technical building blocks that would make all forms of exchange take place and supporting all forms of electronic health information exchange taking place.

The NwHIN is a set of standards, services, and policies that enable secure health information exchange over the Internet. In the rationale for the RFI, the ONC has included why now is the right time to act and establish a governance mechanism. The overall objectives for the governance mechanism are to: (1) enable a more competitive and open market for electronic health information exchange and make it more efficient for these entities to exchange electronic health information, (2) relieve the burden on states that are taking on disparate governance approaches, (3) lay the foundation necessary to support future stages of meaningful use, and (4) work with the HIE marketplace to coordinate and guide the maturation and evolution of

standards and interoperability activities over time. Posnack noted of the governance mechanism that the ONC is trying to establish includes a validation process and a standards classification process. Within the validation process are conditions for trusted exchange (i.e., the "rules of the road," the actual mechanics, entities, the structure, the process for trusted third parties to be validated to the conditions of trusted exchange as well as a process to track the conditions for trusted exchange, introduce new ones, and retire old ones). The standards classification process falls under the purview of the HIT Standards Committee and involves an open, transparent, iterative, deliberative process to mature interoperability specifications and lays out a roadmap for the industry at large. The governance mechanism would include this standards classification process.

The RFI primarily focuses on entities that would facilitate electronic health information exchange on behalf of providers (i.e., the ones that would come forward and prove and demonstrate their conformance to conditions for trusted exchange). The RFI includes a voluntary framework—the ONC does not expect a mandatory process that would obligate everyone who is exchanging electronic health information to go forward through this governance mechanism to be validated through this process. The validation process is intended as an attractive value-added proposition for all participants in electronic health information exchange. Posnack asked Committee members to consider the value proposition for the governance mechanism in the validation process. If it is not going to be valuable to entities that are facilitating electronic health information exchange, then some of the elements laid out in the RFI may need to be reconsidered.

One facet of the RFI includes the adoption of the conditions for trusted exchange (CTE)—the ability for entities that would facilitate electronic health information exchange as trusted third parties to become validated and establish the formal existence of these trusted third parties as NwHIN Validated Entities, or NVEs. Posnack noted that there are three categories of CTE: (1) safeguards CTEs, (2) interoperability CTEs, and (3) business practices CTEs. A total of 16 CTEs are addressed in the RFI (10 safeguard CTEs, 3 interoperability CTEs, and 3 business practices CTEs). The ONC is anticipating the need to group CTEs for different use cases or policy objectives.

Posnack reviewed the eligibility criteria for becoming a CTE, noting that eligible entities may include (but not be limited to) EHR developers; integrated delivery networks; regional, state, local, or specialty-based health information exchanges; health information service providers; and state and federal agencies.

As outlined in the RFI, validation would consist of testing/certification of products or technology (interoperability CTEs) and accreditation of services (safeguard and business practice CTEs). The ONC would select an accreditation body to accredit validation organizations, which would be authorized to validate an entity's CTE compliance. If an entity successfully completes the validation process, it would become an NVE.

Posnack then explained the process to update and retire CTEs. The purpose of this process is to identify and assess current electronic exchange needs and to provide a path for determining how best to address them through the CTEs. The ONC feels that an inclusive and transparent process to identify, modify, and retire CTEs would be needed. He also briefly described the technical standards classification process and concluded his remarks by touching on monitoring and oversight. The ONC believes that a process to receive and address complaints as well as a

process to revoke an NVE's status would be needed. Entities involved in monitoring and oversight of NwHIN governance could include the ONC, NwHIN accreditation body and validation bodies, and federal agencies including the Federal Trade Commission and the HHS Office for Civil Rights.

Discussion

Judy Faulkner asked about the voluntary nature of being certified as an NVE and about the requirements for becoming an NVE. Posnack noted that in the RFI, there is an indication that subsequent policy objectives could be met through leveraging the existence of the NVEs, and that the ONC did not want to preclude, in advance, any particular type of entity from being considered.

Bechtel asked if NVEs would only be entities that are facilitating information exchange on behalf of a provider, or if the designation would apply to a broader set of entities. Posnack explained that ONC's initial focus has been on accelerating electronic health information exchange among providers, but the RFI does not exclude the potential for other types of entities to be considered as NVEs. In response to a question about which group would be responsible for updating and retiring CTEs, Posnack explained that the conditions for trusted exchange would be established through regulation. It is hoped that there would be a process outside of formally adopting the conditions for trusted exchange through which the evolution of CTEs could occur. This process would be facilitated by the HITPC and other groups that could consider how the electronic health information exchange environment is evolving and where a new condition for trusted exchange may be necessary.

4. Remarks from the National Coordinator

Farzad Mostashari, National Coordinator for Health Information Technology, thanked the group for its efforts and for focusing on these critical issues, particularly on what it will take to accelerate trusted information exchange in anticipation of Stage 2. At the end of the day, electronic health information exchange should simply work; it should not require lengthy negotiations, an army of lawyers, or a Ph.D. in informatics. Reaching this simple goal will require a great deal of complex discussion and investment—a crucial part of this is a foundation in common and consistent policies and standards upon which that trust can emerge. He noted that last week, 40 state grantees met to discuss how to accelerate exchange to support meaningful use, and there has been a great deal of exciting progress. The grantees are doing significant work around the standards that ONC and the HITPC have worked together to establish consensus around, such as the consolidated CDA on the content and the direct protocols for transport. However, one consistent theme that emerged was that without having common policies and rules for things like certificate issuance, authenticating providers, and querying directories, each of their implementations risks being its own walled garden. A common floor is needed before there can be a viable and scalable approach to support exchange across the nation.

During this meeting as the HITPC Workgroups provided their detailed analyses of the RFI, Mostashari asked Committee members to consider if ONC could adopt a common set of requirements for entities that would facilitate electronic health information exchange on behalf of providers that could immediately support meaningful use Stage 2 and ultimately other forms of exchange. What would the minimal set of common requirements need to be in order for those entities to engage in electronic health information exchange without a separate agreement with

each other? How should the entities have to prove that they have met those requirements? Answering these two fundamental questions would represent significant progress.

5. Discussion of Workgroup Comments on RFI

Governance Workgroup Chair John Lumpkin started the discussion with Question 3, which asks about the urgency related to needing a nationwide governance approach for electronic health information exchange. The Workgroup agrees that there is a need for rational nationwide government exchange to help alleviate disparate efforts at the local, regional, and statewide levels which have substantially increased the cost and burden of doing exchange. Fragmentation of governance methods and approaches has increased the time, cost, and complexity of exchange-to-exchange governance. The Workgroup feels that the framework should be lightweight initially, leveraging the federal government's coordination function. Nationwide governance is needed to reduce the cost of exchange and eliminate the need of redundant local or otherwise limited governance. Because the technology is still nascent, government should not restrict innovation and should be responsive to the evolution of the process of exchange. The Workgroup suggests that there be a balance, recognizing that there is not yet a mature health informatics marketplace in which market checks and balances could limit anti-competitive behavior, so some intervention to protect the public interest is required. The Workgroup recommends that ONC develop more information on market forces and continue to closely monitor the HIE connectivity space to ensure that consumer interests are protected.

With regard to Question 1, the Workgroup felt that the three CTE categories were appropriate, but that one was missing. The group recommends that the governance process should first focus on establishing and defining the policy objectives in and across each category and that subsequently there should be a process for identifying the detailed certification criteria that would achieve these policy objectives, and which would then be validated by accreditation or the certifying body. The policy objectives are likely to change only slowly over time whereas associated standards, accreditation, and certification may be subject to more rapid change. Therefore, the rules should describe a specific process for developing, maintaining, and revising accreditation and certification criteria associated with the policy-level CTEs, which may be different from validation of the CTEs themselves.

Lumpkin pulled Questions 2, 4, and 7 together, noting that the Workgroup felt that with regard to the success criteria, it is first important to define what success looks like. The objective of the criteria to identify the approach includes things such as being cost effective in establishing interoperability and trusted exchange. It is participative and accepted by a broad range of stakeholders, including consumers, and raises the levels of standards and interoperability maturity in the health care system within and among NVEs, and is sufficiently flexible to allow for dynamic changes in the market and technology and helps states fulfill their responsibilities to their citizens without having to create structures of their own.

A voluntary approach would be sufficient if, as the Workgroup expects, other incentives are tied in by other public entities. Lumpkin explained that these principles address Question 4, and that the answer to Question 5 is "yes" based on the Workgroup's response to Questions 2, 3, and 4.

With regard to Question 6, the Workgroup believes that alignment with state governance approaches should be a success criterion. In addition, existing and future grants have voluntary and other policy levers to encourage alignment with the national framework. Micky Tripathi added that the government could play a role in the orchestration of various policy levers that are

short of an outright mandate to participate that could strongly encourage registration. It will be important for the federal government to assert that it will be a driver of adoption of these policies by its requirements that it will impose through its programs. If there is a high bar set on CTEs and participation in general, then it will take a larger amount of orchestration by the federal government to make it work. Gayle Harrell pointed out that states are already going in this direction, and that some clear message from ONC is needed to let states know about the direction in which the Office is moving to try to avoid discrepancies in state policy versus federal governance.

Lumpkin then moved on to Question 8 and indicated that the ONC has a number of critical roles, including endorsing and adopting CTEs as well as publishing guidance facilitating input from the various FACA committees on revisions and creating new CTEs and retirement, selection, and oversight of the process of accreditation, as well as overall oversight of entities and processes. The ONC should ultimately oversee the process for selecting and overseeing an accreditation body and should play an arbiter role for any disputes. The Office should produce operationally defined descriptions of CTEs for updating and clarifying those definitions and encourage other private entities that may have a significant role to play in adoption and use of standards through various incentives. Bechtel asked about what happens when there are "bad actors" or violations with regard to NVEs that are not "playing by the rules." Lumpkin explained that there needs to be a clear process for verifying some of the self-attested items as well as process to identify when an NVE is not doing what it said it would do. Furthermore, there needs to be an authority to de-accredit and remove entities from the list of accredited NVEs.

The Workgroup felt that Question 9, related to voluntary validation, was not entirely clear. A voluntary approach to validation will only work if there are sufficient incentives to encourage widespread participation, such as a requirement by federal agencies that exchange occurs only with NVEs that have been accredited, incorporation of status into memorandum of understanding, safe harbors, and financial incentives. The Workgroup recommends that the adoption of CTEs should be voluntary and that for entities such as HIOs and HISPs that wish to be recognized as NVEs, adoption and compliance with CTEs should be mandatory. An entity does not have to be an NVE to do this exchange, in certain circumstances, but if it wants to be an NVE, then CTEs should be mandatory. The validation process should be variable based on the CTE. Accreditation for policy and process CTEs should be initially done through self-attestation; however, ONC should consider a more formal accreditation process, including audits and site visits, especially with CTEs that do not carry with them civil or monetary penalty implications or penalties for which there are no other formal compliance processes. David Bates noted that in Europe, the key action that enabled data exchange on a widespread basis was rigorous conformance testing. Some element of that may be needed here. Harrell noted that it is still unclear as to who would conduct the compliance and testing processes for NVEs and in what space. Jan Root pointed out that there is an existing industry standard for health information exchange that involves self-attestation and a site visit, so some work has been done in this area.

Tang summarized that in general, the group is in the "trust but verify" mode, and that the kinds of conformance testing will vary by CTE and organization. Where applicable and necessary, conformance testing could be involved, along with site visits.

For Question 13, the Workgroup's response is that there should not be eligibility criteria that require an entity to have a valid purpose. The Workgroup did recommend that the ONC consider having the entity's purpose made public, so that each company would state its intended purposes.

Question 14 asks whether there should be eligibility criteria that require an entity to have prior experience or a certain number of participants. The Workgroup's response to this question was "no."

Question 15 asks, "Are there other eligibility requirements?" The Workgroup did not recommend others, but did recommend careful consideration of the one that stated that an entity would not have had civil monetary penalties, criminal penalties, or damages imposed or have been enjoined for a HIPAA violation within 2 years prior to seeking a validation. It was felt that the HIPAA validation component would be particularly problematic. The Workgroup feels that this should not be a disqualification; rather, there should be policies and procedures in place to identify the bad actors and take action against them. Deven McGraw reminded the group that roughly 2 years ago, the HITPC adopted a recommendation as part of Stage 1 of meaningful use indicating that if an entity had been found liable for a significant HIPAA violation and had been fined or agreed to pay a monetary settlement in lieu of going through the civil monetary phase, that it would not be eligible for a meaningful use payment, and this would apply at the enterprise entity level, not due to the inadvertent actions of one rogue person/group. McGraw suggested that if an entity is an NVE business associate that has been significantly in violation of HIPAA to the point where it is being fined, perhaps it should not be eligible to participate in the NwHIN. Paul Egerman commented that if an entity has paid its penalty, it should be allowed to participate.

In terms of Question 16, the Workgroup feels that eligibility should not be limited to tax-exempt entities.

For Question 17, relating to the optimal role for stakeholders, the Workgroup felt that stakeholders have a role in many phases, and listed them in its recommendation. It was noted that consumers have a very important perspective that needs to be considered, including in governance.

Question 18 deals with monitoring and oversight. Lumpkin explained that the Workgroup felt that the monitoring enforcement methods should rest on robust validation, and makes recommendations that these mechanisms be included in the governance rule.

For Question 19, the Workgroup recommends that remediation should be a component.

For Question 20, the Workgroup recommends that NVEs should be required to clearly and publicly display their validation standard. The next question addressed expiration date, and the Workgroup indicated that the expiration date should initially be for 2 years. As the validation process becomes more mature, that timeframe may change.

The next question Lumpkin discussed related to commercial purposes. The Workgroup noted that there are many commercial purposes that involve de-identified data that are appropriate, and it supports the phrasing in S-5. However, the Workgroup does not agree with the phrasing in S-6. It recommends that a general principle of local autonomy/governance rule should apply to exchanges between NVEs and that local rules need to be respected.

Lumpkin had to leave the meeting early, but before doing so, skipped forward to a few questions that had direct Governance Workgroup input. He noted that with respect to Question 55, related to aggregated metrics, the Workgroup could not reach agreement on what level that aggregation should be; whether they should be aggregated at the local level and then sent up at a higher level, or whether they should be sent *de novo* up to a higher level and then aggregated at that point. He

also noted that with regard to Question 38, it would be difficult to implement the preferred set liability on S-10 (the CTE that refers to the NVE must have a means to verify that a provider requesting an individual's health information through a query and response model has or is in the process of establishing a treatment relationship with that individual). The Workgroup feels that the responsibility should remain at the level of the provider, not at the level of the NVE. In response to Question 58, Lumpkin explained that no one size fits all, and the bundling/packaging of CTEs should reflect this. The Workgroup has a detailed comment on the question that asks "What process should we use to update CTEs" that gets back to the point that not all CTEs are the same. Each of the CTEs would have its own timeframe for review and renewal/change, if necessary. Judy Faulkner pointed to the need to determine what should be done if validating bodies are behind schedule. Lumpkin concluded his remarks by noting that for Question 61, the Workgroup did feel that validation bodies should be permitted to provide validation to pilot CTEs. For Question 62, the group felt that the FACA process is very important and plays a critical role.

The HITPC did not offer comments on Question 22, which was referred to the HIT Standards Committee.

For Question 23, the Information Exchange Workgroup flagged the fact that one section (164.314) was not included in the list of HIPAA requirements. The HIT Standards Committee is expected to take the lead on this question.

Both the Tiger Team and Information Exchange Workgroup commented on Question 24, "What is the most appropriate level of assurance that an NVE should look to in directly authenticating and authorizing a party for which it facilitates exchange?" McGraw noted that the CTE is framed in terms of authentication, but it actually covers both identity proofing and authentication. The Information Exchange Workgroup recommended that there be a high degree of assurance in authenticating parties for which it facilitates exchange. Tripathi noted that many health information exchange organizations that have attempted this have been tripped up on the issue of trying to reconcile differences in authentication requirements among entities. This is expected to be a challenge for NVEs as well, and it will be important to try to minimize these differences so that they do not become a barrier. It should not produce undue burdens on other NVEs that would disrupt exchange services in general. McGraw commented that it will be much more efficient and effective for exchange among entities if they are permitted to do entity-level authentication, entity-level issuance of certificates with each entity then responsible for distributing the information appropriately and authenticating individual users. ONC and the Tiger Team have continued to struggle with the Federal Bridge infrastructure that these groups had hoped to rely on, both to provide the level of assurance that are being sought as well as to allow entities to exchange readily with federal partners. It is still an open question as to whether that can actually occur. McGraw noted that whether the current legal infrastructure under HIPAA, where NVEs are business associates and are not necessarily liable for authentication and identity, at a physician level, needs to be carefully thought through. Egerman summarized the Tiger Team's comments related to Question 24 by noting that the group wants a high degree of assurance at an entity level, and that it liked the concept of the Federal Bridge, but identified technical issues with it.

Questions 25 and 26 relate to whether the entity can be relied on and whether additional standards are needed. McGraw commented that additional Tiger Team work is needed in these areas.

Question 27 relates to the CTE regarding meaningful choice and asks about accommodating various meaningful use approaches – opt-in, opt-out, or some combination of the two. McGraw noted that opt-in/opt-out is not as important as giving people the opportunity to make good decisions with good information. Some states have already established certain choice policies, and ensuring consistency in implementation is a challenge. An NVE is required to apply its policy with respect to the data sharing that it performs or facilitates. It is not responsible for complying with everyone else's policy. Tripathi noted that the Information Exchange Workgroup felt that the NVEs should not be required to be the organizations that are obtaining, documenting, recording, and storing the patients' consent preferences. Certain NVEs may choose to do so for practical reasons or because it is part of their business model. It should not be a requirement, however. The Workgroup would rather see an approach that allows the market to determine where that responsibility would most appropriately land (and it will likely vary by market).

McGraw noted that Questions 27 and 28 are bundled together, and essentially the message is to reinforce that it is not about opt-in or opt-out, but about meaningful choice. When choice is triggered depends on the model of exchange. With regard to whether the process of giving patients choice can be delegated to providers, providers would have to play a very strong role in securing consent from their patients. Physicians would play a role in asking patients whether or not it is acceptable to share data with an NVE. McGraw continued that there could be NVE models in which the NVE would have to be responsible for making that documentation, depending on how that data is being stored, how the exchange is being facilitated, etc.

Egerman commented that Question 30 is somewhat confusing, particularly in terms of the definition of an NVE. Mostashari asked if the directed query use case had been considered in the context of Question 30. McGraw explained that the Information Exchange Workgroup did not consider this model specifically. The core concepts embedded in the Workgroup's recommendation relate to the locus of decision to release data. When it rests in the NVE in an automated way, that is where the patient could be surprised, and that is a model that triggers choice. Where the provider, who is the locus of the patient's trust, still has the decision making authority to release, then that looks more like directed exchange. Faulkner asked about the "magic button," through which one group, usually in the same community as another group, has a button into that other group's EMR and vice versa. This scenario almost creates a different type of organize health care arrangement (OHCA). McGraw clarified that more than just record sharing is needed to qualify as an OHCA. An entity must also hold itself out jointly to the public as being in some type of joint arrangement.

In response to Question 31, McGraw explained that the Information Exchange Workgroup saw no need to create any exceptions to the CTE. The Workgroup felt that the statement "an NVE must only exchange encrypted IIHI" was redundant of S-1, which makes all addressable implementation specifications under the HIPAA security rule required. Encryption of data in motion and at rest is an addressable specification that is rendered required by S-1. Tripathi added that it is appropriate to have a CTE related to NVEs being transparent about data exchange that could be outside the purview of HIPAA.

McGraw proposed grouping all of the questions related to CTE S-5 together (Questions 32-26). These questions relate to the requirement for an NVE to make publically available a notice of its data practices, describing why IIHI is collected, how it is used, to whom, and for what reason it is disclosed. The Information Exchange Workgroup believes that an NVE should have a notice

about its data practices regarding IIHI as well as a notice about its data practices with respect to de-identified data. This is consistent with a previous HITPC recommendation that intermediaries or HISPs should be transparent with their customers about what they are doing with de-identified data. It is recommended that this be a layered notice, so that there is a short, easy-to-understand component. The notice should be posted on the NVE's Web site and provided to the NVE's participants so that it can be shared with patients. The notice needs to be comprehensible by the average person, using language appropriate for the community it is serving. It also should be accessible to persons with disabilities. Egerman noted that many of these types of notices tend to be written in such a way as to protect the health care organization. In this case, there is a push to have a transparency notice written such that it is oriented toward the patient or consumer. A notice about data practices should not necessarily be translated into a requirement to disclose a customer list. Neil Calman suggested that the language used in the notice should be at more of a fifth-grade reading level as opposed to understandable by the "average" person.

In response to a question, McGraw commented that public health has not been left out of these discussions, and that there are many secondary uses for which robust data exchange is needed. However, this raises a more complicated series of policy questions that haven't yet been fully addressed by the HITPC. With respect to standing up a governance infrastructure that supports some basic exchange needed to meet meaningful use, there are some population health uses that would clearly be included. McGraw then summarized a lengthy discussion on consent by explaining that if an entity adds a purpose for which its network can be queried, or data can be pulled from it, it goes without saying the people need to have an opportunity to decide whether or not they want to be part of the new arrangement. Arthur Davidson pointed out that de-identified data poses a problem for secondary uses of data. McGraw agreed, noting that the HITPC has indicated that the recommendations it has made to date regarding consent apply to IIHI. McGraw also explained that the concept of re-use or re-disclosure assumes that there is an independent legal operation that floats with that piece of data versus a set of legal obligations that constrain an institution in what it can do with data once it gets it and presumes that the institution is getting it for a purpose for which it is authorized to use it. Faulkner pointed out that there may be instances where patients may not know where there data end up. McGraw agreed that this can be the case. Every effort is being made to be as clear as possible to patients about what might happen to their data once it is disclosed, but there is a limit to what can be anticipated.

Larry Wolf discussed the need for developing a framework for de-identification. Tang summarized the discussions to this point by indicating that the group appears to be in agreement that the NVE should disclose the classes of use that it is purporting to get meaningful consent around. The implications of transitive consent are not well understood by patients or consumers. Once the data go to the organization that the patient has agreed to, the organization can do anything within the constraints of the law that it wants to with that data. Education and transparency are needed to ensure public understanding of this issue.

Question 37 relates to CTE 6, whether an NVE should be prohibited from using or disclosing de-identified health information to which it has access for any commercial purpose. Tripathi explained that the Information Exchange Workgroup felt that condition S-6 as written would have a chilling effect on many existing and emerging business models, to the market, and to NVE participation in general. The Workgroup recommends that instead of prohibiting the use or disclosure of de-identified information, that NVEs instead be permitted to disclose de-identified

information subject to a set of four principles: (1) as permitted under business associate agreements, (2) when uses are disclosed in a public notice, (3) when the information meets de-identification standards, and (4) when the NVE prohibits downstream recipients from re-identifying patient information. Lumpkin, who had re-joined the meeting via telephone, noted that the Governance Workgroup felt that there were appropriate commercial purposes and agreed with Tripathi's earlier comment that a strict reading of S-6 would have a chilling effect. McGraw noted that some Tiger Team members felt that prohibiting NVEs from using or disclosing de-identified data for commercial purposes could eliminate a potential model of sustainability and that any other entity not part of the NwHIN would be able to do this under law, but the NVEs would not. Other Tiger Team members expressed concern that this was about the trust between NVEs from one to another and that if an NVE was allowed to disclose even de-identified data for commercial purposes, they would not want to share their data with them. De-identified data can slip out of coverage under HIPAA or any other law and therefore could be used in ways that patients would not agree with, might arguably harm them from a discrimination standpoint, and could be used to create market advantage or disadvantage among competitors. The Tiger Team did agree that NVEs should be required to abide by HIPAA standards for de-identification and that they commit to not re-identify and bind their downstream recipients. It was noted that if commercial use is prohibited, the term "commercial use" must be clearly defined.

Wolf continued the discussion of de-identified data, explaining that it is de-identified with respect to the patient. Recently, there has been some media coverage around selling data that has the provider's information in it. Some states have tried to prevent this, arguing that there is a provider privacy component. He noted that some of the HIEs that do use their data sets for research have been very clear about protecting the identity of the individual provider organizations when that research happens. McGraw clarified that de-identification refers only to the patient's identity under HIPAA. It does not require masking, stripping, or aggregating as to provider, and as such can be provider identified. Harrell emphasized that the patient needs to understand what the potential uses of their data are, and transparency is a key component of this. If the data are going to be shared and used, it needs to be extremely well stated in a notification. Davidson noted that from a public health perspective, there are valuable uses of de-identified data that public agencies conceivably could pay NVEs to collect/provide/analyze. Tang commented that these issues are relatively new for patients, and over time new uses that are acceptable will surface and societal norms will change. McGraw pointed out that although there is a widely held belief that patients are uncomfortable with uses of their de-identified data, survey research indicates that there is a significant proportion of individuals who are comfortable with this, as long as their identity is protected. The challenge is addressing issues that go beyond HIPAA and are made possible by both exchange and creating a new intermediary—in essence adding a category of de-identified data that would come under consent requirements. David Lansky suggested that it may be premature to try to institute a blanket policy in this area, particularly if it closes off many of the desirable analytic purposes that could benefit society from a research perspective (e.g., looking at patterns of care across time). It may not be possible to solve this issue with a simple phrase in a proposed regulation.

Given the discussion on this topic, McGraw commented that the HITPC likely will not be able to wordsmith a CTE on which it could reach consensus. One clear theme that emerged is that Committee members would like to understand better what is meant by the term "commercial purpose." Tang suggested that one of three options be pushed forward within the context of commercial use: (1) meaningful consent is never needed, (2) meaningful consent is always

needed, or (3) there should be a way to define certain commercial uses that are appropriate with meaningful consent. Bechtel suggested that the group consider the legal definition of "commercial use" which relates to profit, and then defining profit. It may be that it would be acceptable for groups to provide data for commercial to the point where they recover their cost but do not make a profit.

Tang reset the discussion, explaining that the CTE deals with the NVE's function in health information exchange only. The NVE may or may not collect data as part of the exchange function. Mostashari added that if the NVE does collect data, it does so under different auspices than its identity as an NVE for information exchange. Tang suggested the following language: "The NVE acting as a health information exchange will not use de-identified data for commercial purposes." Provider organizations could continue doing whatever they are allowed to under HIPAA at present, and would need to have meaningful consent for any activity not covered by HIPAA. It was noted that the Committee had reached agreement in terms of requiring NVEs to commit to not re-identifying de-identified data.

Probst asked about consent, noting that consent will be needed to send the data and share it with an NVE. Will multiple levels of consent be needed (e.g., for data aggregation within that same NVE)? McGraw explained that this is an issue for the Committee to explore and relates to the type of NVE model in use. The Committee is struggling with the issue of whether there is a role for consent for certain uses of de-identified data.

McGraw explained that Question 39 would be handled by the HIT Standards Committee.

McGraw lumped the discussion of Questions 40 and 41 together. These relate to CTEs S-8 and S-9 and the obligations of an NVE to patients when they assemble or aggregate identifiable health information that results in a unique set of IIHI. One proposed CTE (S-8) is that the patient would be able to access a copy of that, because it is unique information and so, presumably, it is not necessarily also in the hands of their provider. CTE S-9 deals with the patient's right to seek an amendment to that unique set of information. McGraw noted that the Tiger Team was conflicted on these issues. A number of Tiger Team members felt that if there is unique data being assembled or created in this NVE, absolutely the patient should have the right to see it, to get a copy of it, and to seek an amendment to it per the HIPAA privacy rule process, if they need to do that. Other Tiger Team members felt that the NVE is not the entity that has the relationship with the patient, and that the patient should deal with their providers and the originators of the data. Other Tiger Team members expressed a strong desire to ensure that patients can access data that is unique about them and is being assembled or aggregated by an NVE, although there was not enough time to further explore this issue.

Wolf suggested that the Committee seems to be rethinking architecture, one example at a time, and although it may be outside the context of this meeting's discussions, the HITPC should consider revisiting this with some coherence around this evolving architecture. This may lead to better clarity regarding how to address these policy issues. Bechtel noted that these questions relate to conditions of trusted exchange, meaning that consumers should have the ability to access a copy of the information that is held about them and the ability to correct it. When consumers cannot access and see the information that is held about them, it creates enormous trust issues. Faulkner added that in these cases, the NVEs will have to be able to translate data into lay terms. David Lansky explained that moving down this path also may create a new set of entities that choose not to be subject to these constraints because they do not want the cost and

burden associated with being accountable to the individual consumer or patient. Davidson suggested that the NVE is not necessarily the best mechanism for getting data back to the patient and further suggested that the Committee indicate that there must be a mechanism to provide the information back, which may be worked out in the business model in each community. It may be that the patient's doctor's office does a query and brings back an aggregated record.

Question 43 reads, "What method or methods would be least burdensome, but still appropriate for verifying a treatment relationship in the context of a query model?" The related CTE indicates that NVEs must have the means to verify that a provider requesting an individual's health information through a query response has or is in the process of establishing a treatment relationship with that individual. McGraw explained that the Tiger Team's response reflects an understanding of the RFI that NVEs could be engaging many different types of exchange, and the group was very uncomfortable with thinking that one could use a query and response from an NVE for purposes beyond the Stage 1 meaningful use criteria. With respect to whether one could query for a patient who was not necessarily their patient, there might be circumstances where this should be allowed (e.g., in the treatment of newborns, where it is often important to have information about the mother).

With regard to Question 44, which starts to deal with the interoperability CTEs, McGraw noted that the Privacy and Security Tiger Team needs to further delve into the issue of digital certificates. The team also had written comments related to patient matching. McGraw had to leave the meeting early and noted that the Tiger Team's written comments were made available to the Committee.

Tripathi explained that Question 45 discusses multiple standards and seemed to not be linked to the ongoing effort related to standards for EHR certification. The Information Exchange Workgroup wanted to ensure that if there is a determination that it is preferable for NVEs to support only one mechanism, or have only one mechanism be a part of the validation, that it ought to be adherent or aligned with the transport requirements included in the EHR vendor certification, once the 2014 edition is finalized. The Workgroup also recognized that SOAP is used by many public health efforts and is the priority mode of transport. The Workgroup recommends that rather than require NVEs to necessarily support one or multiple transport mechanisms, NVEs should be left to determine which transport mechanism is preferable for the clients they serve and for the use cases that they are involved with. Also, for any use cases/standards/implementation guides that overlap with a meaningful use transaction that is specified in the 2014 edition, those should be synchronized so that if there is an overlap, the one from the EHR certification is used so that there is no misalignment. Mostashari asked that the language be revised to provide clarity in this regard, to indicate that it is not at the NVE's discretion to choose which mechanisms they choose for which use case.

Question 46 relates to Question 45. Tripathi noted that there is not any reason at this level to be for or against a secure, RESTful transport. However, to the extent that there is a process for validating that as a standard and having an implementation guide that is actually actionable, this should be just like any other standard made available through this process for NVEs that choose the particular CTEs that would rely on that.

In terms of Question 47, Tripathi noted that there was no concern on the part of the Information Exchange Workgroup about whether VNS or L-DAP is used in this case. However, the Workgroup was interested in ensuring that this aligns with whatever comes out of the

certification process related to EHRs. To the extent that there are points of overlap, they should be absolutely consistent. In response to a question from Davidson, Tripathi explained that NVEs will be able to communicate with each other using Directed exchange and that Connect may be included as well.

Tripathi noted that for Question 48, there was agreement that the interoperability CTE should be consistent with policies of the federal certification authority, and that there should be allowance to use a market-based approach with federal guidance for establishing policies pertaining to organization or group digital certificates.

With regard to Question 49, the Information Exchange Workgroup did not believe that it was appropriate to establish a universal accuracy level or minimal error ratios. Tripathi explained that there are certain cases in which the use cases are not part of what the NVE is doing, and there seems to be a fair amount of openness in the market. Both the Workgroup and the Tiger Team are in agreement that it is too premature for any specification of accuracy levels at this time. Wolf noted the higher concern related to data quality for the identifiers. The focus should be on getting good data and standardizing the data sets, rather than on the algorithms. Tripathi noted that this discussion also covered the standards included in Question 51.

The Information Exchange Workgroup spent a fair amount of time discussing Question 52 and referred to basic general concepts of net neutrality to help frame its discussion on this question.

Tripathi summarized that there should be a basic set of dial tones, or a dial tone service, made available across NVEs and for which no fees are charged and no other barriers placed. This core set of exchange capabilities, or dial tones, would be absolutely fluid across all of the NVEs. That framework should not prohibit NVEs from being able to charge and offer for charge value-added services that would be on top of those basic dial tone services. Mostashari explained that this question relates to how NVEs deal with one another. He added that health care organizations like the VA might chose to become NVEs, as might other large delivery networks, EHR vendors, etc. Tang noted that these discussions also covered Question 53 as well.

Tripathi explained that as related to Question 54, there should not be any prohibitions on imposing requirements on other NVEs in the context of value-added services. The Workgroup also expressed the need to avoid creating non-financial barriers to preventing the free flow of information for those basic dial tone services discussed for Questions 52 and 53.

For Question 55, the Information Exchange Workgroup identified the need to balance an obvious societal interest in having transaction volumes and various types of information reported so that tracking from a population level can occur, with wanting to be sensitive to the interests of any particular NVE that may see some of this data as proprietary and could represent a barrier for their participating. The reporting standards should be transparent to both the public and the NVEs to ensure their participation, and the data should be de-identified from an NVE perspective.

For Question 56, Tripathi noted that the Information Exchange and Governance Workgroups, as well as the Tiger Team, identified the need for a structure and a model for grievances.

There were no comments on Question 57, which relates to performance and service specifications.

Tang noted that Questions 58-62 and 65 had been discussed previously, and moved the discussion forward to Question 63. Tripathi explained that the best way to provide CTEs with

guidance is to provide funding for pilots, specifically, supporting and funding pilots related to leading edge concepts to test market feasibility. Wolf added that it may be helpful to actively scan the environment to look for models as they develop so that there is a chance to identify and include them as appropriate.

There were no Committee comments on Question 64.

Tripathi summarized the response to Question 66 point by point, starting off by noting that with regard to the cost of validating, there could be a great deal of movement around different CTEs that could change the concept of what NVE validation would be. It will depend largely on the range of services offered by the NVE and which CTEs apply to these services. Therefore, it is very difficult to give a general idea of the cost of validation. Unless costs are reasonable and minimized wherever possible, cost would represent a barrier to participation, unless there are other strong incentives in place to push organizations to participate. With regard to the potential savings to states/other organizations, Tripathi explained that there likely are three categories to consider: (1) states that either already have or are considering pursuing their own accreditation process, (2) those that have not contemplated doing this and perhaps may not, and (3) those that are going to do this anyway. Individual states may feel the need to have additional kinds of conditions of trusted exchange that are specific locally and do not necessarily align with federal and state law. From the vendor perspective, there was a sense in the Information Exchange Workgroup that, assuming that the CTEs in general and the entire concept is at a level that does not have significant barriers in the way of cost, it actually could be quite a spur to the market and that there could be hundreds, if not thousands of organizations that would ultimately seek to get this kind of NVE validation. In this area, again, the Workgroup noted that prohibiting the use of de-identified data would have a chilling effect and could substantially reduce the potential number of participating organizations. The Workgroup also felt that it would be extremely difficult to make an estimate on the application and reporting burden, because it will vary widely.

Bechtel suggested that there may be health care organizations and vendors who want to be NVEs and would be willing to do so without funding, and asked if it may be worth trying a pilot along those lines, to see if it works. Wolf pointed out that one of the consistent requests he hears from individuals involved with HIEs is that the ONC develop a roadmap to indicate where this field is moving to help in developing business plans/models. Mostashari referred Committee members to the March Health Affairs article titled "The National Strategy for Health Information Exchange," which represents an attempt by the ONC to detail such a roadmap for the future.

Mostashari summarized the discussions related to the RFI by noting that the Committee has been deliberating on an approach to begin supporting all three mainstays of the strategy for health information exchange. It quite clearly will not be a one size fits all solution, but a solution reached by establishing a series of building blocks on standards, around content, around messaging, around transport, and around trust. The first model is ubiquitous directed exchange, directed push and potentially directed queries, where the endpoints are known. It is part of care that is directed by the patient and providers. Challenges exist in a number of areas. How do we deal with security certificates? How do we deal with open phone books and directories for identifying? How do we deal with rules of the road for how that's going to occur? That is one band.

The second is a more complex approach to sharing information, including queries that pull information not from a single centralized approach, but rather from a multitude of local approaches, affinity networks, integrated delivery networks, HIEs, and regional health efforts. They will draw on some of the same building blocks around security certificates, around the rules of the road, etc.

The third model is not a business-to-business or business-to-community model of exchange, but rather one that has exchange mediated through the consumers themselves; information exchange mediated through the patient, where the patient can choose to be a centralized repository of one, they aggregate their information. If they wish to, they can assemble that information through ever easier ways of aggregating through automated pushes to their electronic medical home and having them share information with who they please.

Tang closed this session by thanking Committee members, Workgroup members, and others who rapidly put together these responses to the RFI. The only outstanding question relates to commercial use, and efforts will be made to obtain additional insight and feedback on this issue.

6. Data on Stage 1 Meaningful Use Attestation and Barriers

Robert Anthony, CMS, provided a status report as of the end of April for Stage 1 meaningful use. He also provided draft numbers for May, discussed the attestation thresholds CMS has for the Medicare EHR Incentive Programs for Meaningful Use, and reviewed some of the registration and payment data.

Anthony reported that registration continues to be fairly consistently high. In April, more than 12,000 providers registered for the program, putting overall registration at more than 238,000 as of the end of April. Seventy one percent of hospitals that are eligible to participate in the program have registered to do so, and they are closing in on half of all eligible professionals (EPs) being registered in the program. With regard to April meaningful use payments, Anthony explained that all of the Medicare payments are for providers who are actually meaningfully using EHR technology and meeting all of the objectives. Medicare paid approximately $340 million in April alone to more than 8,700 providers. Anthony broke the payments down by specialty; not surprisingly, most of the Medicare participants are in family practice and internal medicine. The number of specialties participating remained fairly consistent. Overall, the CMS is reaching a plateau in terms of how much it pays each month in incentive payments. This tends to hold true on the Medicaid side as well, where CMS paid roughly $250 million in adopt, implement, and upgrade (AIU) payments in March, and close to $200 million for both meaningful use and AIU in April for Medicaid. Altogether, CMS has paid out approximately $540 million as of the end of April, to more than 94,000 eligible professionals, and has made about $5 billion in incentive payments.

At present, 45% of all eligible hospitals have received an EHR incentive payment, either for meaningful use or AIU. Whether they are meaningful users or not, 45% of eligible hospitals in the country have made a financial commitment to having an EHR in place. Additionally, approximately one out of every seven Medicare EPs are meaningful users of EHRs (the last time CMS presented to the HITPC, it was one out of every nine). One out of every five Medicare and Medicaid EPs total have made a financial commitment to an EHR. The percentage of Medicare EPs who are receiving an incentive and are specialists is remaining steady. Despite the common perception that the program is geared towards primary care, almost 60% of meaningful users who are participating are not in primary care.

Anthony reviewed draft numbers for May, and provided highlights of the attestation data, including almost 70,000 EPs and almost 1,300 hospitals. Out of the EPs that have attested, only 277 have been unsuccessful. Of those 277, 167 resubmitted and were successful in their attestation. So, only 110 EPs of almost 70,000 have been truly unsuccessful.

Discussion

In response to a question, Anthony clarified that while almost 50% of EPs have registered, only about one in five have received a meaningful use or AIU payment. One Committee member noted that it would be interesting to see if there is any difference in EHR penetration among those not in this cohort of EPs, but are in the group of overall providers. Tang commented that the Health IT Incentive Program is working and is increasing the rates of adoption.

7. Comments from the United Kingdom's Secretary of State for Health

Tang provided a brief overview of the history and role of the HITPC and introduced Andrew Lansley, the United Kingdom's Secretary of State for Health. Lansley explained that from the U.K. point of view, they are aiming for a system that continues to be highly equitable while achieving excellence. Achieving that excellence is not about a service that simply gives people the same thing, regardless of their needs or wishes, but is something that is very responsive. Both the U.S. and U.K. are aiming for the same thing—a system that is both highly equitable and excellent, without sacrificing one for the other.

Lansley explained that his predecessors subscribed to the view of trying to secure the benefits of increased investment in information technology to support health care systems and set out on a path of a centralized procurement, because the U.K. has a centralized health care system. Unfortunately, it demonstrated that a one size fits all solution was not the right answer. However, the U.K. was able to establish a network across health care providers and family practices, a spine for the transfer of information, as well as a system for the transfer of digital images and a system to process prescriptions. But when it actually came to the functionality of empowering patients and clinicians, a top-down system did not respond to the users. Over the last 2 years, Lansley's office has been utilizing the contracts in place and varying them to deliver something that is much more flexible and responsive to the health care providers themselves.

When Lansley came into his office two years ago, he and his colleagues set out to put patients at the heart of how they designed the future of the National Health Service. The principle they adopted was "no decision about me without me," and so, shared decision making between clinicians and patients is absolutely instrumental to their effort. Recently, an information strategy for the National Health Service was published. It represents a recognition that the provision of information is a health and care service in its own right. Improving results can be delivered through the system by the manner in which the information is used and mobilized. The National Health Service is setting out to get the right information to the right people at the right time, in a form they will understand and engage with. It is not just about access to information, it is about support and advocacy to people so that they can make meaningful use of this information; it means something to them, and they can use it for themselves; not just use it as providers, but use it as patients, families, and carers.

Lansley pointed to the need to join up systems and share data standards. He endorsed the view of the ONC and HITPC in terms of their approach of not specifying what hardware people should buy or what software people should buy, but the means by which they should be able to communicate and share data with one another, for the benefit of patient. The National Health

Service feels that it can use online and digital systems to transform health and care in the same way as any other business. It is aiming to reach a sense of everybody moving rapidly, pulled by innovation and service innovation to make this happen. Therefore, the want to take the technology that is taken for granted in the outside world and make it applicable to the National Health Service, which represents a culture change for the organization. In the past, the National Health Service had taken the view that if it required something, it would design it for itself, apply it to itself, and apply it to its patients. Now, however, it is looking for patients to take control of their own data and their own record, to be able to share it with other systems, hopefully in a way that enables them to be confident about the quality of those systems and about their ability to control who has access, if at all, to their identifiable information and patient-sensitive information. The vision is that patients will be able to book appointments and order prescriptions online, repeat prescriptions online, communicate electronically with health care professionals, and use online/IT services to improve health. By 2015, it is hoped that everyone in England will be able to access their general practice record electronically. At present, roughly one in four patients have summary care records available electronically.

Lansley explained that within the context of the National Health Service, almost every patient is registered with a general practice and so by extension, almost every patient has a general practice record as their core medical record. It is envisioned that patients will be able to access those online, share that information with others who care for them, and know how the information in their records (including their preferences) will be shared securely between the professionals providing their care. The results of tests will be available rapidly and electronically to provide faster diagnosis.

From the U.S. perspective, U.K. patients currently have less choice. However, that choice is expanding in the U.K. The National Health Service vision includes allowing patients to leave feedback about their health and care experiences, and there are five primary outcomes being sought: (1) a reduction in avoidable mortality, (2) an improvement in recovery following treatment, (3) an enhancement to the quality of life of patients living with long-term conditions, (4) a reduction in avoidable harm, and (5) an improvement in patients' experience of their own care. An additional goal is an increasing confidence that patients' data are not only used for their benefit, but for the benefit of population health as well. The National Health Service has the capacity to arrange databases to link up a large (roughly 50,000,000), diverse population with the prospect of having substantial, consistent information about this population for research purposes.

Discussion

Tang thanked Lansley for his comments, noting that the U.K. vision is in line with the U.S. vision. Calman asked whether the National Health Service is using the EHR in some way to facilitate patients' access to information that might be beyond what they get from their own physicians. For example, does the National Health Service maintain a database of information on pharmaceuticals with patient-accessible information? Lansley indicated that this was the case. Patients are given access to their general practice record. It will take time and will be a work in progress for a period of time, to bring essential information from hospital records into the general practice record, if they have not already been provided. If patients are given access to their health record, immediate access online to test results, and immediate access to discharge summaries from hospitals, it should effectively keep them up to date with their record. The National Health

Service has started the process of publishing data about the relative performance of general practices across the country so that patients can determine how well they are doing.

Lansky asked about how the work the National Health Service has done on patient-reported outcomes is envisioned to grow and fit with the IT component. Lansley commented that patients and the public have told the National Health Service very strongly that they regard the outcomes being sought not only as the patients' report of clinical effectiveness, but also their experience of the care. In response to a question from Tang, Lansley explained that if he were to talk to a cross-section of the British population at the moment, they would still feel uncomfortable about the long-term possibilities of the National Health Service accessing their records. However, he has found that survey work has indicated that if the public feel, for example where research is concerned, that before the data is linked up and shared, it has been anonymized and is no longer identifiable and put in a structure in which it cannot be dis-aggregated and identify them, then they believe in it, and they believe in the value of contributing to research. There is roughly an 85% positive subscription to that concept in the U.K.

Harrell asked how the U.K. deals with privacy concerns in its system, how they assure the public, and what safeguards they have built in that could represent lessons learned for the United States. Lansley reminded the group that the U.K. starts from a system that was established on the basis that that there was going to be a National Health Service IT scheme (i.e., one scheme for the entire country). There are roughly 18,000 locations between general practices, referred to as the National Spine, and they are all connected. In this scheme, the general practices own the data. Ideally, the National Health Service wants to arrive at information governance that ensures that in the same way as patients trust their local general practice with the data, they continue to trust the National Health Service with their data. One of Lansley's goals is to reach a position at which clinical decision making, led often through general practice, is directly combined with decision making about the allocation of resources. The same should be true for the use of information.

Following these comments, Mostashari thanked Lansley for his time and input, and opened the meeting for public comment.

8. Public Comments

Carol Bickford of the American Nurses Association asked Lansley how the U.K.'s National Health Service is integrating the various clinicians in the recordkeeping process. Specifically, she asked whether different clinicians have unique identifiers so that they can verify what care the registered nurse, graduate nurse, the physical therapist, etc. is providing. Lansley explained that from the nursing point of view, the use of technology and the use of EHRs in hospitals and in patient administration systems is increasingly being linked to re-designing the way in which nurses deliver care. To illustrate, he described how senior nurses in the Northwest of England had redesigned the way in which they deliver care, centered on the proposition that nurses would always be entering any data relating to a patient at the bedside, entering once, and entering it electronically, as opposed to moving to a nurses' station and entering the data from there. This will greatly increase the amount of time nurses spend with patients.

John Anderson of the New Mexico Health Information Technology Regional Extension Center commented that he found the discussion of shared decisions in the UK extremely interesting as they might apply to some of the needs in the United States. During this meeting, there was a great deal of discussion about HIE sustainability and how to move forward in that area. If the

field can move towards exchanges that can provide longitudinal records as a form of a patient health record, then that brings the provider into an area and a level of confidence where they are willing to accept that record and perhaps adopt that form of integration from the shared decision point of view, while at the same time, if it was something that was useful to the patient, they might be willing to pay $10 per year for that. For some HIEs in this country, that could actually pay their annual budget. Anderson noted that he saw significant synergy between what Lansley presented and some of the Committee's discussions during this meeting. Lansley commented that what Anderson described is what the U.K. is striving for, something that reaches back and sees a patient in the long-term context and supports the integration of care over a longer period of time. Lansley explained that there is a need to move away from thinking of health care as something that occurs only in episodes. It does not happen in episodes. Health care is a lifelong commitment. In his experience, it is not about structural organizational change that delivers integration, it is the willingness of professionals to work together to make that happen.

SUMMARY OF ACTION ITEMS:

Action Item #1: Minutes from the May 2, 2012, HITPC meeting were approved by consensus, with some edits from Christine Bechtel.